



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

## PHYSICAL EDUCATION IN COLLEGES.

---

To those who are familiar with the subject it has long been evident that there exists in the public mind a wide-spread misapprehension as to the amount and the system of physical training in American colleges. The tone of current newspaper comment,—often humorously intended, to be sure,—is nevertheless misleading to readers whom it unconsciously influences. Athletics, gymnastics and aquatics are not the chief subjects of college instruction, as certain editors would have us believe, and as a certain proportion of otherwise intelligent people seem really to suppose. And in the present article we desire, as briefly as possible, to correct this mistaken notion and to call the attention of educators to the urgent need of some system of physical exercise in our higher institutions of learning.

During the past few years the science of physiology and hygiene has made rapid advancement. The elementary laws of health have been more widely diffused and more intelligently followed by the people at large. The medical profession are trusting less to drugs and more to natural agents. Air, food, sleep and exercise, when properly administered, are great remedies as well as great preventives of disease, and doctor and patient alike begin to realize this fact. Our houses are better ventilated, our tables more healthfully provided, our time for sleep is lengthened, outdoor games are growing popular, and our styles of dress have been perceptibly modified in favor of health and comfort. This spirit of the age is recognized by the governing bodies of our colleges and seminaries, who announce in the catalogues of their institutions that due attention is given to health and physical training. Parents are attracted by these announcements, and send their sons and daughters to college in the confident hope that they will receive physical as well as mental training and development. But their expecta-

tions are seldom realized. The intelligent system of physical culture which they had been led to expect exists only in the imaginations of the trustees and faculty.

It is true that nearly all of the larger seminaries and colleges in the New England and Middle States are provided with gymnasiums, or their students have access to some place for practicing physical exercises. In a few of these institutions light gymnastics are made a part of the curriculum, and are conducted under the eye of a capable instructor. The apparatus used consists of wooden dumb-bells, wooden wands and Indian clubs, which vary in weight from one to four pounds each. The movements are arranged in a progressive series, and are designed to call into gentle activity all the muscles of the body. The time allotted to these exercises varies from one hour to two hours a week, and extends over a period of from three to eight months. In some cases regular attendance is required for the first year only, in others it is kept up throughout the school or college course. The maximum of required gymnasium work in any institution is not over two hours a week, and in one instance it is but one hour a week for a single term. No one acquainted with the structure of the human frame, or knowing anything of its natural requirements, will undertake to say that a half-hour four times a week devoted to muscular exercise is excessive, especially when the apparatus used is of the lightest description. Yet this is all that is provided in the way of physical culture by the corporation in the best of our literary institutions.

Now, what does the student do for himself? This depends partly upon his temperament and disposition, and partly upon his surroundings. If he is strong and robust, overflowing with life and vigor, he takes naturally to outdoor sports; if he is of a studious turn of mind, or of a phlegmatic or melancholic temperament, he is less inclined to active exercise and falls more readily into sedentary habits. These inherited tendencies are sufficiently strong, we think, to warrant us in grouping college students in four great classes: (1) The athletes; (2) The sporting men; (3) The scholars; (4) The idlers.

The class of athletes is made up of those who give most of their time and energy to boating, base-ball, foot-ball, and general gymnastics. Those who take part in these sports are chosen on account of their peculiar fitness for the position to be filled. A candidate for the university crew must possess at the

outset a large and vigorous frame, must be especially strong in the back, loins, and legs, and have great powers of endurance. These qualifications, we say, must be possessed at the outset, or a man cannot hope for a place in a college or a class crew, and outside these crews very little rowing is done by individual students. The improvement in the art of rowing has shut out the majority from participation in this sport. If they own boats, well and good; they can row when they like, and as long as they like; but, unfortunately, this luxury can be enjoyed only by the few. Moreover, other obstacles, such as rough water, rainy weather, low tides, obstructions in the river, and its distance from college, combine to render this sport impracticable and unreliable as the sole agent in any system of physical culture. Even where every provision is made to render this exercise accessible and attractive, but a very small percentage of the students avail themselves of it. At Harvard, Yale, Columbia, and Cornell, less than five per cent. of the students row regularly; and in the smaller colleges we find that, unless a regatta is anticipated, the boat-house is hardly opened at all. A few years ago several of these smaller institutions sent representative crews to Springfield and Saratoga. The money raised to defray the expenses of these crews was subscribed under the pretense of awakening a general interest in boating, whereas it benefited only those who underwent the three months' training, and was of personal interest only to those whose physique insured them a place in the next year's crew. And when we look over the ground to-day we find that the only men who are enjoying the advantages of boating are the men who do not need them.

These remarks in regard to the boating men are almost equally true of the ball-players. The game has been reduced to a science, and only one who possesses the necessary skill and experience can hope to belong to the nine. In most cases this skill is acquired long before entering college, and the tendency thenceforward is to develop to the extreme the abilities that have already displayed themselves. To maintain the standard of excellence now required of college players necessitates from two to three hours' practice daily in the field and a winter's work in the gymnasium. This is more time than is needed to keep the body in good working condition, and more than the mass of students can spare. Hence, to the majority the advantages of base-ball are practically denied. Only eighteen men can play at

a time, and two regular nines are all that the largest of our colleges maintain. The game, therefore, is limited to a class of experts, and only those who are members of the nine get the benefit of systematic training.

The game of foot-ball opens a somewhat wider field. More men are required, the rules are easily mastered, and the qualifications demanded are more generally possessed. One should be sound and healthy in heart and lungs, and able to stand thumping and bumping for an hour or two with impunity. If to this hardiness be added a fleet foot, strong limbs, quick perception, and presence of mind, one has the requisites of a foot-ball player. But, as even this game is now played, skill is of the highest importance, so that here again we see the same tendency to raise the standard of the sport, and to narrow participation to the capacity of the few. Moreover, there are serious objections to this game. We have not the space to discuss them. It is a rough-and-tumble contest from the beginning to the end; bruises, strains, or internal injuries are its natural accompaniments. Of all college games this is the most accessible, and yet for the average and untrained student it is unquestionably the most dangerous.

The athletic contests, or "field days," of spring and fall open a still wider field for physical achievements. The exercises comprise running, jumping, walking, putting the shot, throwing the hammer, and similar sports. These afford an excellent chance for the specialist to display his abilities, and only specialists enter them. In their case the entire energy of the system has been concentrated on the development of special powers, and everything else set aside as useless. This is the great objection to athletic exercises as they are at present conducted.

The gymnasts, as a separate class have, of late years, been rapidly diminishing in numbers. Outdoor sports have grown in popularity, and the gymnasium is now used, regularly and systematically, chiefly by the boating men and the ball-players, as a means of keeping up their strength during the long winter months, and of adding something to the skill required in their chosen sport.

We have thus seen that the whole system of college athletics is based upon a spirit of competition. Symmetry of development is never thought of, nor is it ever acquired by exclusive reliance upon any of our popular sports. Indeed, we would venture to

select from any group of recognized athletes the oarsmen, the ball-players, and the gymnasts, simply from their peculiar muscular development. In many cases these peculiarities are so marked that one can readily distinguish a starboard from a port oar, the pitcher, catcher, and short-stop from the rest of the nine, and tell the piece of apparatus upon which a gymnast has won his distinction. To devote themselves wholly to some favorite sport; to make a "record" that shall be talked about by future classes; to become famous as oarsmen, or pedestrians, or ball-players: these are the ambitions of the men who are giving their time to such exercises. The tendency of college students to-day is to look upon college athletics simply as a field for rivalry.

We have thus far been speaking of the men whom we termed collectively the college athletes, but this class comprises only a small proportion of those who attend our literary institutions. There is a second class, whom we have called sporting men. In what does their physical culture consist? Mainly in attending the races and games. If the river and the ball-ground are at a distance, a tramp to either calls for a little exertion, but in the exercises themselves the sporting men never participate. "Tailorizing" is for them a more convenient method of making up for physical deficiencies. They do the betting, and contribute largely to the financial support of the several athletic organizations; but they are never seen in the waist of a boat or on the floor of a gymnasium. From this class of men, however, often comes the best athletic material. Their spirit and buoyancy are indicative of a good natural heritage, and with these innate qualities for a basis, a thorough system of training produces the most favorable results. It is just this kind of temperament that should find a legitimate channel for activity in systematic exercise. Let this exercise be mental or physical, laborious effort of some sort should be exacted daily. Perhaps the fatigue following physical effort is for this class the most beneficial, as it is rarely accompanied by nervous irritability, and it sets at rest those vague, undefined longings which often supervene after severe mental application.

Still another class is composed of those men who attend strictly to the college requirements, and who may appropriately be termed the scholars. In this group are to be found the hardest intellectual workers, men who study almost incessantly during their waking hours, and among whom are some of the most

highly organized and finely balanced students in college. It is needless to say that these men take no time for exercise or recreation. They never go to a boat-race or a ball-match, and the feats of the gymnasium are distasteful to them. A hurried walk into the country some Saturday afternoon, or a ride to the seashore, gives a little exhilaration; but physical effort of all kinds is irksome to a close student, and, unless he is accompanied by an agreeable companion, his mind is invariably brooding over some lesson or problem as he saunters along. Walking in this manner is merely taking an airing, and is no more beneficial than sitting by an open window. In the ranks of the scholars we find, however, a relatively small number who direct their college course intelligently to the acquirement of symmetrical culture. Systematic habits of study are supplemented by systematic habits of exercise, and they would no more neglect one than the other. Such men are often called machine-workers, but they are the ones who profit most by their exercise, because they take it regularly and make it subservient to their highest aims.

Of the idlers little need be said. They differ essentially from the classes we have considered, but chiefly in a negative way. They have no favorite pursuit, either intellectual or physical. They are surrounded by the stimulating influences of college life, but their inertia is seldom overcome, the golden days of youth are wasted, and the opportunities of mental and bodily training are carelessly thrown aside.

In enumerating these four great classes we have not attempted to deal with the exceptional cases. That there are many such cases in every college we are well aware. But our purpose has been to bring out the prevailing characteristics of each class as a body, to show the motives that prompt them to exertion, and to review their efforts in the direction of physical culture. To summarize, we may say that the athletes devote too much time to the development of special powers, and sometimes carry their exercises to excess; that the sporting men rely upon their inheritance, physical and financial, and make no attempt to renew their capital; that the scholars, as a class, take too little exercise; and that the idlers take no exercise at all. When we consider the relative numbers in these several classes in all our colleges, it is safe to conclude that, of the whole number of students, not more than ten per cent. give any attention whatever to physical exercise, and that less than six

per cent. take it systematically as a means of culture and development.\* Surely, then, the charge that too much time is given to muscular education in our literary institutions has the slenderest possible foundation in the facts of the case. And it must be evident, too, that the members of college crews and ball nines are not in any proper sense representatives of the physical condition of the average students in their respective institutions. The bane of American college life to-day is the spirit of prize-getting which underlies and inspires the entire system. It is equally powerful in every department of education. It utterly destroys harmony of development. It unduly cultivates a student's powers in one direction, and dwarfs and stunts his growth in every other. The valedictorian has no time for exercise, or is too weary to take it; the champion athlete has no time for study, or is too stupid to begin it. One sits in his room with a wet towel about his head, and conscientiously works out his allotted task; the other stretches himself upon a lounge and has the day's lesson poured into him by admiring comrades. Both are toiling for fame, though in opposite directions. Both have won honors for their Alma Mater; so she gives them the same certificate of acquirements. And as to subsequent usefulness in the world, there is little to choose between them. There needs to be a recognition of the supreme value of unity in education, of the harmonious cultivation of a man's mental, moral, and physical nature. Now, we ask, if physical exercise is thought by our college faculties to be of so much importance that they should permit and encourage a certain class of students to devote two, three, and four hours a day to body culture, often to the neglect of their studies, would it not be well to make some provision for those who are not athletically inclined, but who are more in need of exercise, and to whom, if judiciously applied, it would be of the greatest benefit? This is to be accomplished only by furnishing every fitting school and every college with a well-equipped gymnasium, by making its exercises a part of the regular curriculum, and by having them executed under the supervision of a competent instructor. By many institutions these requirements have been met in part; that is, one college

\* The reader will understand that we are speaking of American colleges as a whole, and that the general interest in physical training among the students of Harvard, Yale, and some others of our larger Eastern institutions is exceptional and not representative.



is provided with a fine gymnasium, another has a good instructor, and a third has made its exercises obligatory. We know of but two or three institutions in the country where all these advantages are combined. The gymnasium is, and has been since the days of ancient Greece, the great school of physical education. All its appliances were invented for that purpose. And as gymnasiums are used to-day, why are they not a success? Simply because they do not accomplish the object for which they were established: they fail to give every man who has access to them a complete and thorough physical training. But this is not the fault of the gymnasium in itself. Let us look at the building and the apparatus provided by some of our colleges, then at the manner of conducting the exercises, and then inquire as to the character and ability of the men who have charge of the gymnastic department and the principles upon which they are appointed. We shall doubtless find that the want of interest has not been wholly due to the obstinacy of students, but that the fault may be traced back, directly or indirectly, to the faculty or the boards of trustees and overseers.

A gentleman gives forty or fifty thousand dollars for the erection of a gymnasium. The planning is handed over to an architect who has no idea of the kind of building required, but who feels it his duty to get up something that will at least be an ornament to the campus. He generally succeeds in doing this, and the donor and the corporation are satisfied. But what can be said of the structure, as to its fitness for a temple of health? It is a building eighty feet long and half as many wide, poorly lighted, heated, and ventilated. The bath-rooms are on one floor, and the dressing-rooms in the attic or cellar. The walls, roughly finished in brick or granite, are frescoed with dust in the summer and with frost in the winter. The floor is made of spruce, and its seams are filled with gravel. In fact, incongruity and unfitness meet us on every side and in almost every detail. Why should this be so, when the amount of money contributed is large enough to meet all demands, and the ground space allotted is ample? Because the architects and builders employed do not know the requirements of a good gymnasium, and seldom seek the advice of those who have practiced gymnastics for years, and have made a life-study of the subject. The result is an edifice not adapted to the work for which it was designed. Exceptions should be made of the finely constructed gymnasiums

at Harvard and Princeton ; nor would we judge too sternly those institutions which have been obliged to remodel an old building in order to have any gymnasium at all.

Having put up a building, the authorities proceed to fill it with apparatus made by the college carpenter. This is arranged for appearance' sake rather than for use. The material is selected without regard to fitness, and put together with little knowledge of its object or design. Hanging ropes are made of hemp, and stiffly tarred to make them durable. This object is effected, for they are never used twice by the same person. The parallel bars are broad at the base and narrow at the top, so as to render the grip insecure ; and they are generally made of some splintering material, in order to remind the performer which way he is going. The trapeze is bolted to a beam in the highest part of the room, and left pendent twenty-five feet from the floor. Its bars are made of wood or iron, two inches in diameter, and, that the novice may have every opportunity of losing his balance, holes are made in the ends of each bar, the ropes put through and tied with knots underneath. The rungs on the horizontal ladder are three-quarters of an inch in diameter, and left rough, so that they may be firmly grasped, while in the vertical ladders they are smoothly polished. Both are carefully avoided, for, in the first case, every swing forward raises a blister ; and in the second case, every step upward is attended with positive danger. The sand-bag weighs seventy-five pounds, and is covered with the heaviest kind of canvas. One solid blow removes the skin from every knuckle, and makes an impression that lasts for a life-time. This performance is never repeated. The mattresses weigh four hundred pounds each, and are filled with excelsior, or corn-husks, which from constant rolling have become matted together, in lumps. One had better land upon the floor than upon one of these cradle-knolls, for the former only occasions a little tingling of the feet, while the latter invariably causes a sprained ankle. The weights are neither boxed in wood, nor framed in iron ; but they start from a trough filled with saw-dust and dirt. Every movement is accompanied by a cloud of dust and a deafening rattle and bang.

This is a fair representation of college gymnasiums throughout the country. They are built without intelligent plan, filled with heavy, cumbersome, and in many cases perilous apparatus, and then left open to the hap-hazard experiment of all who choose

to try them. With however good intentions of self-improvement a student may enter a college, he is disheartened at the outset by such a gymnasium as this. He finds no appliances adapted to his needs as a beginner, and no provision for progressive development. Constant assistance and direction are offered him in every branch of college work save this; here he finds nothing worthy of the name of instruction. When we consider that two-thirds of the students who enter college are not strong enough to use the heavy apparatus with pleasure or profit, the need of introductory apparatus becomes apparent. Wooden dumb-bells and Indian clubs do not meet this need. Something is demanded by which the biceps and triceps may be brought into alternate action, and the muscles of the back, loins, abdomen, and chest, according to their requirements. If those desiring to use the heavy apparatus would prepare themselves for it by bringing the required muscles into gentle action at first, and would then go step by step through a progressive series of exercises, they would not only find themselves increasing in power, but they would experience a certain satisfaction and acquire a discipline from the accomplishment of difficult maneuvers, which no mechanical exertion can give. The apparatus which leads one gradually up to the beneficial use of the heavy appliances may be termed adjustable weights and pulleys. These can be so arranged as to act upon any set of muscles and be adapted to any condition of strength or weakness. In order that they may be used wisely, some one should be in attendance who has a thorough knowledge of animal mechanics and the action of the muscles, as well as a comprehensive idea of the structure and function of the various organs upon which vital action depends.

This brings us to a consideration of the men who are chosen to superintend the department of physical education. For every other branch of college instruction men of recognized ability are selected, and they are then required to maintain a certain standard of excellence. But in the department of physical culture the governing boards of our colleges have seen fit to make an exception. When we find the gymnasium almost deserted, there is a cause aside from poor apparatus and unattractive quarters. It is the lack of a suitable man, with sufficient authority, at the head of the department—a man who is a college graduate, a practical gymnast, and an educated physician. Such a man, we say, must have sufficient authority; for, unless he is supreme in

his own department, and can have the coöperation of the faculty, he can do no better work than an inferior man with more freedom. Many instructors possess one or more of these qualifications. Thus, some are college graduates, others are educated physicians, and a few are practical gymnasts; but all the requirements are seldom found in the same person. This is only because there has been no demand for such men. So long as college boards look upon the position as one of minor importance, and pay but a mere pittance to its incumbent, men of ability will not undergo the training necessary to prepare them for its arduous duties. Consequently these positions to-day are occupied by men who are under-graduate students working for their tuition, students in medicine or law, tutors in some other branch of college instruction, or resident physicians. In only three or four instances are thoroughly trained gymnasts employed to superintend the gymnasium. Under such circumstances the men are obliged to make their gymnasium work a secondary consideration, and a man cannot do his whole duty by this department and attend to another at the same time. Yet this is what nearly every college instructor in gymnastics is doing. He intends to make his present position a stepping-stone to something else. He devotes as little time as possible to its duties, and expends his energies in preparing for his life's pursuit. As soon as he gets his diploma he resigns his position and makes room for the next incumbent. It matters little who his successor is, but to meet the demands of the times some one must be catalogued for the place. The demoralizing effect of these annual changes can easily be imagined, and can readily be seen by those who care to visit our college gymnasiums.

We say, then, that the proper physical training of our youth can never be accomplished until our gymnasiums are put in good hygienic condition, are furnished with appropriate apparatus, and are placed in charge of thoroughly competent instructors. To these requirements we will add the most important one of all: that the gymnasium exercises be made a part of the regular curriculum. So far as relates to the training of the mind, a system of required exercises has been universally adopted; but the training of the body has seldom been deemed of sufficient importance to merit like care and attention. We cannot but believe that this mistaken idea has arisen from a misconception of the real function of physical exercise, and of

its powerful influence upon the system at large. So long as body and mind are kept in antagonism, and the demands of one thought to be prejudicial to the interests of the other, but little advancement can be made in physical education. But when it shall be generally known that the object of muscular exercise is not to develop muscle only, but to increase the functional capacity of the organs of respiration, circulation, and nutrition; not to gain in physical endurance merely, but to augment the working power of the brain; not to attain bodily health and beauty alone, but to break up morbid mental tendencies, to dispel the gloomy shadows of despondency, and to insure serenity of spirit; when men shall have learned that much of the ill-temper, malevolence, and uncharitableness which pervade society arises from feeble health, and that the great mental and moral disturbances which sometimes threaten the stability of a government may be traced to physical causes, then will the training of the body rival in dignity and importance the training of the mind, for the interests of mind and body will be recognized as inseparable. This time is coming, though as yet some of our best and greatest thinkers, while admitting the value of physical exercise as an agent of health, still doubt the expediency of making it a department of education. They argue that a college is designed to give a boy an intellectual training, and is in no way responsible for his health and physical welfare. But when we consider that it takes from six to twelve years for a boy to complete his education, that during this time he is almost constantly away from home, and that it is a period with him when the body is peculiarly susceptible to good or evil influences, it would seem that those under whose charge he is placed should have some intelligent care of his physical as well as of his mental and moral training. When boys come from the fitting school equally prepared in body and in mind for the duties before them, it will then do to talk of making our higher institutions of learning training schools for the intellect alone. But, while they are filled with students whose minds have been forced and "crammed" in order to build a reputation for masters and tutors; while class after class enters college well grounded in the classics and totally ignorant of the first principles of physiology and hygiene; while hundreds break down yearly for the want of physical stamina; while precarious health is the rule and a sound and vigorous constitution the exception, it is little

less than criminal folly to talk of such a course. The body must be cared for, and when and how are the only questions open for discussion. If our preparatory schools were more generally patronized, and more liberally furnished with appropriate appliances, we should say that here was the field for physical training. But under present conditions the work, if done at all, must be done in college; and in college the first essential is to put this work on an equal footing with every other. If attendance at chapel or recitations is required, then attendance at the gymnasium should be insisted upon. Make this one of the stated requirements, and the student will look upon it as upon any other college duty. The great majority of students are disposed to do what is thought to be best for them, and the complaint arises—when complaint is heard—from a failure on the part of the faculty or the managing boards to make provision for regular advancement in the exercises which they have introduced.

To keep a class drilling from two to four years with wooden dumb-bells and Indian clubs only, is as great a mistake in a scheme of physical education as it would be to confine the same class exclusively to the study of geometry, with a view to giving them a thorough mental training. Such exercises are elementary in their nature, and in a prescribed course they should precede all others. But, after they have done their work, which is to supple the joints, rather than to develop the muscles, the student should be allowed to go higher. A change is necessary, not only to meet the demands of increasing strength, but to keep up an interest. The pupil must have something to look forward to, something to struggle with and to master. In no place can a system of physical culture be carried out better than in a well-disciplined college. Before the freshman class begins gymnasium work every member should be examined physically, as he had previously been examined mentally, before entering college. Then, instead of putting all in one class, and adapting the prescribed exercises to the capacity of the weakest, grade the class according to the needs of its individual members, and arrange the exercises to correspond. Those with flat chests and consumptive tendencies should be put in one squad; those with weak backs and slender waists in another; those with strong bodies, but undeveloped limbs, in a third; and so on, until the whole class has been divided into squads composed of men of like capacity, and requiring similar treatment. The duration

of this special training would, of course, depend upon the condition of each student, and should be left to the discretion of the instructor. After personal deficiencies have thus been corrected, the students should be transferred to the regular gymnastic class, and the members of this class should be led on from one piece of apparatus to another, until all the popular appliances of the gymnasium have been brought into service. By changing the course of instruction from term to term, and allowing some freedom of choice, a lively interest could be maintained which would add greatly to the benefit of the exercise. At the close of the first year the class should be examined in their work, and be grouped the next year according to their proficiency. The books of the director should be open to inspection, and the vital statistics of each man recorded at the beginning of the year could be compared with those taken at the close. By such a system the physical condition of every student in college could be readily ascertained, and the value of regular and progressive exercise be put to the test. The course that we have described is essentially practicable,—is, indeed, substantially that pursued at Harvard University,—and we believe it to be the only one by which the gymnasium can be made to minister to the wants of all, and its exercises rendered educational.

As a rule, students take about the same rank in required gymnastics that they do in their regular studies. Whether this is due to a superior ability or to a better *morale*, we will not attempt to say. But we can say that those who fail in their studies, for want of application or habits of attention, will be likely to fail in gymnastics for the same reason. Mental characteristics always manifest themselves in physical exercises. We mention this in order to dispel the idea so generally entertained, that, in the so-called physical exercises, brute strength always predominates. Brain and nerve-substance is behind every well-controlled muscular movement. Indeed, the two are so closely connected that it is hard to tell what is due to the mind, and what to the body.

In the system which we propose, we do not leave out of consideration boating, base-ball, and other popular pastimes. But we would have them regarded as recreative exercises, and as such taken during the hours allotted to pleasure and relaxation. So far as they go, they afford the best kind of development; but, to

those who pursue these sports vigorously and earnestly, gymnastics must come in as a corrective. They should be put through a course adapted to bring into action the muscles which their particular pastime has left unemployed. By such a method the gymnasium is made not only a school of physical training, but a school of moral discipline. The accomplishment of difficult feats may not in itself amount to much; but the required development, the habits of self-control, and the rapid and responsible exercise of judgment which is so frequently called for, are powers gained, and cannot fail to be of service to a man in any vocation in life.

In looking over the whole field of physical sports and games we can find nothing so well adapted to the complete muscular education of youth as the exercises of a well-appointed, well-conducted gymnasium. Every variety of apparatus can be introduced, all the movements can be arranged in a progressive series, and the entire system can be adjusted to meet and remedy the physical defects of each individual student. The times are ripe for action on this subject. Public thought is turning to it as never before. People are asking with growing earnestness, if nothing can help them to resist the destructive wear and waste of American business life. When insanity and the hundred forms of nervous diseases are on the increase, and when thousands of our educated young men are falling out in the battle of life for the want of strength and vigor, there is room for anxious questioning about our methods of physical training. Help must come from some source. And the suggestions which we have briefly offered in the present article we believe will secure the approval, because they will appeal to the reason of intelligent thinkers.

D. A. SARGENT.